

REMARKS

This Amendment is responsive to the Final Office Action dated December 18, 2008. Applicant has amended claims 3-5, 20, 33-38, 40, 62, 65 and 97. Claims 1-9, 11-26, 28-40, 42-44, 47-53, 56-62, 65, 66 and 93-98 remain pending.

Applicant has amended claims 3-5, 20 and 35 to correct typographical errors, i.e., for reasons unrelated to the patentability of the claims. Applicant has amended claims 33-38, 62 and 65 in accordance with the Examiner's suggestion to overcome the rejections under sections 101 and 112, which are addressed in greater detail below. Applicant has amended claims 38 and 97 to clarify the distinctions between the requirements of those claims and the references applied by the Examiner to reject those claims under section 102, and claim 40 to be consistent with the amendment to claim 38.

Applicant respectfully requests entry of these claim amendments after the issuance of the Final Office Action. Applicant submits that these amendments are minor, e.g., to correct typographical errors, and place the claims into condition for allowance without requiring further search.

Allowable Subject Matter

In the Final Office Action, the Examiner indicated that claims 1-9, 11-26, 28-32, 44, 47-53, 56-61, and 93-96 are allowed. Applicant appreciates this indication of allowance for claims 1-9, 11-26, 28-32, 44, 47-53, 56-61 and 93-96. As noted above, Applicant has amended allowed claims 3-5 and 20 to correct typographical errors.

Claim Rejections Under 35 U.S.C. §§ 101 and 112

In the Final Office Action, the Examiner rejected claims 33-40, 42, 43, 62, 65 and 66 under 35 U.S.C. §§ 101 and 112. Applicant does not acquiesce in the rejections of these claims, or agree with the Examiner's reasoning for the rejections, for at least the reasons stated in Applicant's previous Amendment filed September 5, 2008. Nevertheless, in the interest of expediting the allowance of these claims, Applicant has amended claims 33-38, 62 and 65 to recite that the medium is "encoded with" instructions, in accordance with the Examiner's suggestion. Applicant requests withdrawal of the rejections under sections 101 and 112 in view of these amendments.

Claim Rejection Under 35 U.S.C. § 102

In the Final Office Action, the Examiner rejected claim 38 under 35 U.S.C. § 102(b) as being anticipated by US 6,055,571 to Fulp et al. (Fulp), and claims 97 and 98 under 35 U.S.C. § 102(b) as being anticipated by EP 1134932A1 by Hoebeke et al. (Hoebeke). Applicant respectfully traverses these rejections to the extent such rejection may be considered applicable to the amended claims. The applied references fail to disclose each and every feature recited by the amended claims, as required by 35 U.S.C. § 102(b), and provide no teaching of a rational reason for modification to include such features.

Claim 38 - Fulp

Fulp fails to disclose or suggest a computer-readable storage medium encoded with instructions that cause a programmable processor of a network layer device to receive a request for transmission of packets according to a quality of service class from a subscriber device, and dynamically configure a quality of service profile stored by a data link layer device for a layer-2 link between the data link layer device and the subscriber device to control the data link layer device to facilitate packet transmission for the subscriber device via the layer-2 link according to the requested quality of service class, as required by amended independent claim 38.

In rejecting claim 38, the Examiner argued that switches (data link layer devices) in the Fulp system receive a request and dynamically configure a quality of service profile in the manner recited by claim 38. Without acquiescing in the Examiner's characterization of the Fulp switches, Applicant has amended claim 38 to clarify that the instructions of the claimed medium

cause a programmable processor of a network layer device to receive the request and dynamically configure to the quality of service profile. Fulp fails to disclose or suggest this requirement of amended claim 38. Withdrawal of the rejection of claim 38 under section 102 is requested.

Claims 97 and 98 - Hoebeke

Hoebeke fails to disclose or suggest at least sending a control message from the network layer device to a data link layer device via an Ethernet control channel to configure a control object stored by a data link layer device to control the data link layer device to provide data link layer functionality in accordance with the request, as required by independent claim 97, as amended. Hoebeke also fails to disclose or suggest sending the control message via a virtual local area network, as recited by claim 98.

In rejecting claim 97, the Examiner cited col. 6, ll. 14-30 of Hoebeke and argued that, according to these teachings of Hoebeke, an internet access server (NAS) informs a subscriber network terminal (CPNT) that a particular subscriber is to receive multicast data via a tunneling protocol control channel. In rejecting claim 98, the Examiner cited the same passage of Hoebeke, and argued that the communication between the NAS and CPNT involves the local network (LN), which the Examiner characterized as a virtual local area network connection. Applicant respectfully disagrees with these arguments, and the conclusion that Hoebeke anticipates claims 97 and 98.

At col. 6, ll. 14-30, Hoebeke indicates that the NAS informs the CPNT that a particular subscriber is to receive the multicast data via a multicast protocol channel (AVCC). As illustrated by FIG. 3 of Hoebeke, all communication between the NAS and CPNT in the Hoebeke system, including communication via the AVCC, is through the access network (AN). According to Hoebeke, the AN between the NAS and CPNT is a circuit-switched, e.g., ATM, network.¹ According to Hoebeke, the LN is between the CPNT and subscribers, and communication between the subscribers and the CPNT may be according to the Ethernet protocol.²

Contrary to the Examiner's argument in the Final Office Action, an ATM virtual circuit channel, i.e., the AVCC taught by Hoebeke, is not a tunneling protocol control channel, as

¹ See, e.g., Hoebeke at paragraphs [0006] and [0019].

² See, e.g., Hoebeke at paragraphs [0007], [0017] and [0018].

recited by claim 97, as previously presented. Nevertheless, in the interest of expediting the allowance of claims 97 and 98, Applicant has amended claim 97 to remove the reference to a tunneling protocol control channel, so that claim 97 requires sending the control message from the network layer device to the data link layer device via an Ethernet control channel. Hoebeke fails to disclose or suggest this requirement of amended claim 97. An ATM virtual circuit channel, i.e., the AVCC taught by Hoebeke, is not an Ethernet control channel, as required by amended claim 97.

Furthermore, contrary to the Examiner's argument made with respect to claim 98, Hoebeke does not teach that the NAS informs the CPNT that a subscriber is to receive multicast data via the LN. Again, according to Hoebeke, the NAS communicates with the CPNT via the AN, and the CPNT communicates with the subscribers via the LN. Thus, the NAS informs the CPNT that a subscriber is to receive multicast data via the AN, and not the LN. As discussed above, Hoebeke teaches that the AN is a circuit-switched, e.g., ATM, network, and the LN may be an Ethernet network. However, the fact that the Hoebeke LN may be an Ethernet network is not relevant to the requirements of claims 97 and 98, because, according to Hoebeke, the NAS informs the CPNT that a subscriber is to receive multicast data via the AN, and not the LN.

For at least these reasons, withdrawal of the rejection of claims 97 and 98 under section 102 is requested.

Claim Rejection Under 35 U.S.C. § 103

In the Final Office Action, the Examiner rejected under 35 U.S.C. § 103(a): claim 39 as being unpatentable over Fulp in view of US 6,754,224 to Murphy; and claim 40 as being unpatentable over Fulp in view of US 6,974,418 to Boura et al. (Boura). Applicant respectfully traverses these rejections to the extent such rejections may be considered applicable to the claims as amended.

Claims 39 and 40 depend from claim 38. Neither Murphy, nor Boura, provides any teaching that would overcome the deficiencies of Fulp with respect to claim 38, which were discussed above. For at least this reason, the rejection of claims 39 and 40 under section 103 should be withdrawn.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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